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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| EXAMINER |
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JARRETT, RYAN A

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| ART UNIT | PAPER NUMBER |
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2125

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,507

Applicant(s)

BRICKFIELD ET AL.

Examiner

Ryan A. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-37,94-99,113 and 114 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-37,94-99,113 and 114 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/3/05 have been fully considered but they are not persuasive.

Regarding claim 16, Applicant argues that Smith does not disclose receiving or processing energy, equipment status and control data from energy users. Smith clearly receives energy data from the energy users as cited in the previous Office Action. Regarding the new features added by amendment, Smith discloses receiving or processing equipment status and control data from energy users in at least col. 13 line 50 – col. 14 line 22. Here, Smith discloses, "Typical variables measured and controlled include zone temperatures and set-points for major components of the HVAC system".

Regarding claims 17 and 18, Applicant argues that Smith does not disclose determining new maximum peak events. However, Smith predicts hourly kWh energy use using a neural network, with predicted weather as an input (e.g., col. 15 lines 42-51). Thus, since Smith predicts hourly energy use for the building or equipment in question, Smith necessarily determines "threats of new maximum peaks". A threat of a new maximum peak in this instance would constitute a certain level of impending energy use, such level being very high or a "maximum" or a "new maximum". To reiterate, since Smith predicts hourly energy use, the system of Smith inherently determines all impending energy levels, whether they are "peaks" or "maximum peaks" or "new maximum peaks" or "minimums" or otherwise.

Regarding claims 33, Smith balances "comfort and service levels" with "market pricing", which Examiner submits are conflicting goals. In fact, Applicant even claims such particular conflicting goals in claim 34.

Regarding claim 98, Smith discloses replacing the energy user in col. 12 lines 37-50).

Claims 94-99 remain rejected under 35 U.S.C. 101. Applicant has not addressed the fact that the claims do not require computer-implementation to accomplish and allow for the involvement of subjective human decision.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 94-99 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims raises a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 94-96, 98, and 99 are directed to abstract ideas since they do not require computer implementation or use of technology to accomplish and since they do not necessarily produce repeatable, concrete results, since subjective human decision could be involved.

Claim 97 depends from claim 96 and incorporates the same deficiency.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 16-37, 94-99, 113, and 114 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al. U.S. Patent No. 6,785,592. Smith et al. discloses

16. (original) A method for minimizing and/or eliminating need for human operator attention in energy management of a building system, comprising: non-human, computerized processing of obtained energy control and equipment status data, wherein the obtained energy, control and equipment status data is for at least one energy user in the building system, said processing including (A) automatic determination of whether at least one energy-relevant event is present or (B) continual optimization of a setting of the at least one energy user (e.g., col. 2 lines 10-47, col. 6 lines 42-52, col. 7 lines 18-30, col. 8 lines 58-65, col. 13 lines 7-19, col. 13 line 50 – col. 14 line 22).

17. (original) The method of claim 16, wherein the energy-relevant event is a threat of a new maximum peak (e.g., col. 15 lines 42-51, col. 18 lines 34-46, col. 19 lines 49-65, col. 22 lines 8-15, col. 22 lines 64-67, col. 23 lines 22-28, col. 24 lines 48-54).

18. (original) The method of claim 17, wherein the peak is selected from the group consisting of a kW demand peak, a lighting peak a carbon dioxide peak and a pollutant peak (e.g., col. 15 lines 42-51, col. 18 lines 34-46, col. 19 lines 49-65, col. 22 lines 8-15, col. 22 lines 64-67, col. 23 lines 22-28, col. 24 lines 48-54).

19. (original) The method of claim 16, including, when a energy-relevant event is automatically determined to be present, immediately activating an automatic response to the energy-relevant event (e.g., col. 2 lines 10-47, col. 6 lines 42-52, col. 7 lines 18-30, col. 8 lines 58-65, col. 13 lines 7-19, col. 14 lines 15-22).

20. (original) The method of claim 19, wherein the automatic response is non-determinative (e.g., col. 15 line 24 – col. 16 line 9).

21. (original) The method of claim 17, wherein at least one intelligent agent, from the obtained energy data, actually forecasts the peak (e.g., col. 15 line 24 – col. 16 line 9).

22. (original) The method of claim 19, wherein the energy-relevant event is a threat of a new maximum peak, and the immediately activated automatic response includes energy reduction interventions to avoid the new maximum peak (e.g., col. 15 line 24 – col. 16 line 9, col. 18 lines 34-46, col. 19 lines 49-65, col. 22 lines 8-15, col. 22 lines 64-67, col. 23 lines 22-28, col. 24 lines 48-54).

23. (original) The method of claim 16, wherein the automatic determination of whether at least one energy-relevant event is present comprises application of artificial intelligence (e.g., col. 15 line 24 – col. 16 line 9).

24. (original) The method of claim 23, wherein the artificial intelligence is selected from the group consisting of neural networks; rule-based expert systems; and goal-based planning systems (e.g., col. 15 line 24 – col. 16 line 9).

25. (original) The method of claim 16, wherein more obtained energy data is processed in a given time period than could be processed by a human being (e.g., col. 15 line 24 – col. 16 line 9).

26. (original) The method of claim 16, wherein the building system comprises at least two buildings (e.g., col. 9 lines 25-34).

27. (original) The method of claim 16, including machine-based learning from the obtained data and/or machine-based constructing a model from the obtained data (e.g., col. 15 line 24 – col. 16 line 9).

28. (original) The method of claim 16, wherein the building system includes a building or buildings selected from the group consisting of at least one university building; at least one hotel building; at least one hospital building; at least one car dealership building; at least one shopping mall; at least one government building, at least one chemical processing plant; at least one manufacturing facility; and any combination thereof of buildings (e.g., col. 10 lines 13-25).

29. (original) The method of claim 16, wherein at least two buildings are under management and are geographically dispersed (e.g., col. 9 lines 25-34).

30. (original) The method of claim 16, wherein a human operator is not needed (e.g., col. 2 lines 10-47, col. 6 lines 42-52, col. 7 lines 18-30, col. 8 lines 58-65, col. 13 lines 7-19, col. 14 lines 15-22).

31. (original) The method of claim 16, wherein the building system includes at least two buildings and the at least two buildings are commonly owned or not commonly owned (e.g., col. 9 lines 25-34).

32. (original) The method of claim 16, including automatic documentation of energy savings attributable to any said automatic interventions (e.g., col. 18 line 64 – col. 19 line 9).

33. (original) The method of claim 16, including machine-based reasoning to select between at least two conflicting goals (e.g., col. 12 lines 60-67).

34. (original) The method of claim 33, wherein the machine-based reasoning is to select between a market price goal and a comfort-maintenance goal (e.g., col. 12 lines 60-67).

35. (original) The method of claim 16, including a computerized display of energy data and/or device (e.g., col. 11 lines 22-29).

36. (original) The method of claim 16, including, on human demand, computerized forecasting, computerized simulation of an effect or effects of a proposed control action; and/or computerized reporting on simulation at various levels of aggregation (e.g., col. 8 lines 24-34, col. 15 lines 52-62).

37. (original) The method of claim 36, wherein the aggregation level for the computerized reporting is at an individual device, at everything in a building, at a set of buildings, or everything commonly owned (e.g., col. 13 line 61 – col. 14 line 6).

113. The method of claim 16, wherein the computerized processing further includes processing an obtained energy curtailment response (e.g., col. 7 lines 19-30, col. 8 lines 48-65, claim 13).

6. To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 above are further rejected as set forth below in anticipation of applicant amending these claims to place them with the four statutory categories of invention. Smith et al. discloses:

94. (original) A compilation of energy-relevant data, comprising: an electronic stream of energy, control, and equipment status data for at least one individual energy user within a

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plurality of energy users, wherein the electronic stream of data is compiled in real-time by the at least one individual energy user and is received by a management system to control performance of the at least one individual energy user (e.g., col. 7 lines 19-30, col. 8 lines 58-65, col. 9 lines 1-10, col. 12 lines 1-8, col. 13 line 50 – col. 14 line 22).

95. (original) The compilation of claim 94, wherein the at least one individual energy user is within a multi-building system wherein separate streams of data are provided for other individual energy users within the multi-building system (e.g., col. 7 lines 19-30, col. 8 lines 58-65, col. 9 lines 1-10, col. 12 lines 1-8, col. 13 line 50 – col. 14 line 6).

96. (original) A data analysis method, comprising leveraging an electronic stream of energy, control and equipment status data for at least one individual energy user within a plurality of energy users, wherein the leveraging includes a comparison against historic data for a device associated with the at least one energy user wherein the electronic stream of data is compiled in real-time by the at least one individual energy user and is received by a management system to control performance of the at least one individual energy user (e.g., col. 7 lines 19-30, col. 8 lines 58-65, col. 9 lines 1-10, col. 12 lines 1-8, col. 13 line 50 – col. 14 line 22).

97. (original) The data analysis method of claim 96, wherein the leveraging includes computer- based searching for rapid deviation from a historic pattern (e.g., col. 7 lines 19-30, col. 8 lines 58-65, col. 9 lines 1-10, col. 12 lines 1-8, col. 13 line 50 – col. 14 line 6).

98. (original) A method of determining whether to repair or replace an individual energy user, comprising: reviewing an electronic stream of energy and equipment status data for the individual energy user, wherein the individual energy user is contained within a plurality of energy users; and replacing or repairing the individual energy user when deemed inefficient

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based on the data (e.g., col. 7 lines 19-30, col. 8 lines 58-65, col. 9 lines 1-10, col. 12 lines 1-8, col. 12 lines 37-50, col. 13 line 50 – col. 14 line 22).

99. (original) The method of claim 98, wherein the plurality of energy users are contained within a multi-building system (e.g., col. 7 lines 19-30, col. 8 lines 58-65, col. 9 lines 1-10, col. 12 lines 1-8, col. 13 line 50 – col. 14 line 6).

114. The compilation of energy-relevant data of claim 94, wherein electronic stream of energy, control and equipment status data further includes an energy curtailment response (e.g., col. 7 lines 19-30, col. 8 lines 48-65, claim 13).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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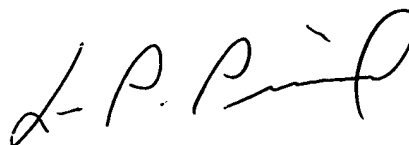
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan A. Jarrett
Examiner
Art Unit 2125

3/23/05

A handwritten signature in black ink, appearing to read "L. P. Picard", written in a cursive style.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100